

Map 8.3 The Byzantine Empire at the death of Justinian in 565 and in 1025. The insert shows the Empire nearly 500 years after Justinian's reign, in 1025. Although it had shrunk in size, the Byzantine Empire remained a powerful force in the Eastern Mediterranean throughout the Middle Ages.

whether after you have been saved you may not come to feel that you would have preferred to die." Justinian may well have begun construction of the new Hagia Sophia to divert attention from the domestic turmoil stirred up by the warring gangs. And he may have conceived his imperial adventuring to serve the same end (Map 8.3). In 535, he retook North Africa from the Visigoths, and a year later, he launched a campaign, headed by his general Belisarius, to retake Italy from the successors of Theodoric. But through his massive building program, especially, Justinian aimed to assert not only his political leadership but his spiritual authority as well. His rule was divine, as his divine works underscored.

Hagia Sophia At the emperor's request, Procopius [pruh-KOH-pee-us] of Caesarea (ca. 490–ca. 560), Justinian's official court historian, wrote a treatise, *On Justinian's Buildings*, celebrating the emperor's building campaign. Book 1 is dedicated to the new Hagia Sophia (Figs. 8.19 and 8.20) that Justinian erected on the site of the one that had burned down. As a result of Procopius's writings, we know a great deal about the building itself, including the identity of its architects, two mathematicians named Isidorus of Miletus and Anthemius of Tralles. Isidorus had edited the works of Archimedes, the third-century BCE geometrician who established the theory of the lever in mechanics, and both he and Anthemius had made studies

of parabolas and curved surfaces. Their deep understanding of mathematics and physics is evident in their plan for Hagia Sophia.

Their completely original design (Fig. 8.21) consisted of a giant dome on a square base, the thrust of the dome carried on four giant arches that make up each side of the square. Between these arches are triangular curving vault sections, called *pendentives*, that spring from the corners of the base. The dome that rises from these *pendentives* has around its base 40 windows, creating a circle of light that makes the dome appear to float above the *naos*, underscoring its symbolic function as the dome of heaven. The sheer height of the dome adds to this effect—it is 184 feet high (41 feet higher than the Pantheon), and 112 feet in diameter. In his treatise *Justinian's Buildings*, Procopius describes the central domed section of the church (Reading 8.8):

READING 8.8

from Procopius, *On Justinian's Buildings* (ca. 537)

So the church has been made a spectacle of great beauty, stupendous to those who see it and altogether incredible to those who hear of it. . . . It abounds exceedingly in gleaming sunlight.

You might say that the [interior] space is not illuminated by the sun from the outside, but that the radiance is generated within, so great an abundance of light bathes this shrine all round. In the middle of the church there rise four man-made eminences which are called piers, two on the north and two on the south, each pair having between them exactly four columns. The eminences are built to a great height. As you see them, you could suppose them to be precipitous mountain peaks. Upon these are placed four arches so as to form a square, their ends coming together in pairs and made fast at the summit of those piers, while the rest of them rise to an immense height. Two of the arches, namely those facing the rising and setting sun, are suspended over empty air, while the others have beneath them some kind of structure and rather tall columns. Above the arches the construction rises in a circle. Rising above this circle is an enormous spherical dome which makes the building exceptionally beautiful. It seems not to be founded on solid masonry, but to be suspended from heaven by that golden chain and so covers the space.

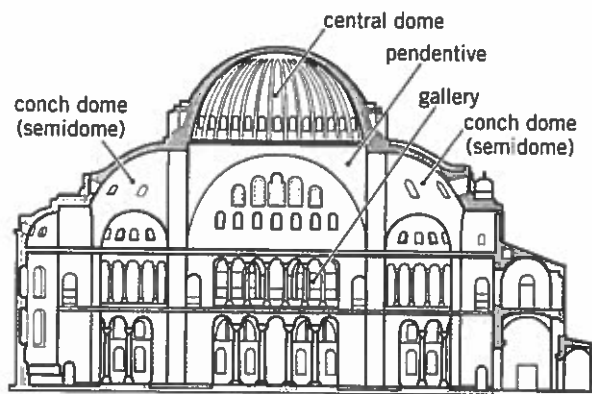
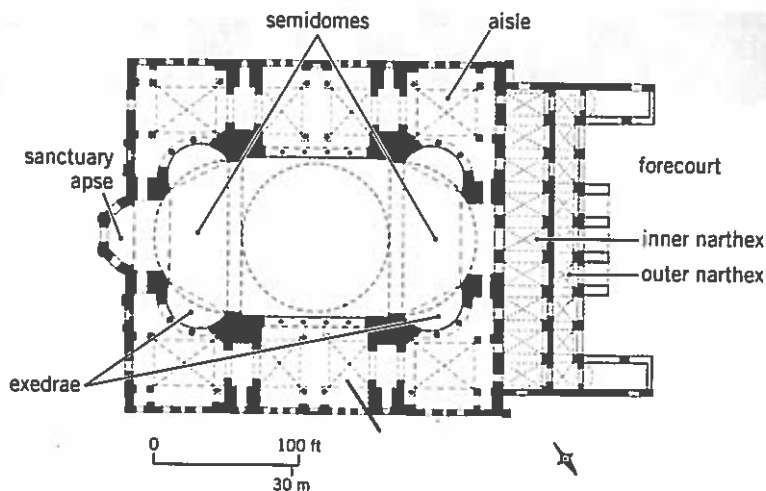


Fig. 8.21 Anthemius of Tralles and Isidorus of Miletus. Plan and section of Hagia Sophia, Istanbul. 532–537.



Fig. 8.20 Interior of Hagia Sophia, Istanbul. 532–537. So vast is the central dome of the church that it was likened, in its own time, to the dome of heaven. It was said that to look up at the dome from below was akin to experiencing the divine order of the cosmos.

Procopius does not mention that to the east and west, beneath the arches, are conch domes, or half domes, semicircular structures that spread out from a central dome, extending the space, and that these in turn are punctuated by yet smaller conch domes. Thus, a succession of curving spaces draw the visitor's eyes both upward to the symbolically heavenly space of the dome and forward to the sanctuary apse, seat of the altar and the liturgy. The intricate and lacy carving on the lower levels lends the stonework an almost immaterial lightness. The domes above are believed to have been covered with mosaics, probably consisting in the sixth century of plain gold grounds ornamented with crosses. Light from the windows around the base of the dome and conch domes would have ricocheted around the gold-covered interior, creating the magical, even celestial light that Procopius describes.

St. Catherine's Monastery Justinian was not content merely to rebuild Constantinople. Bridges, roads, aqueducts, monuments, churches, and monasteries sprang up around the Empire. Not the least important of these sixth-century works was the fortress and monastery known as St. Catherine's

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Materials & Techniques

Byzantine Mural Mosaics

Byzantine mural mosaics were made by embedding into a soft cement or plaster more or less regular squares of naturally colored stone, together with squares of opaque glass, which offered an even greater variety of color. These squares are called *tesserae* (singular *tessera*), from the Greek word meaning "squares" or "groupings of four." Gold tesserae could be made by sandwiching gold leaf between two layers of glass, a practice widely used in Byzantine mosaics. Artists first outlined the image on the wall, then

covered successive areas with cement or plaster, filling in the tesserae as they went. Each tessera was set at a slight angle to the one adjacent to it, so that as light struck the squares, the changing angle of refraction would create a shimmering, almost heavenly radiance, both mystical and spiritual. In contrast, Greek, Roman, and earlier floor mosaics were usually laid with flat tesserae in a perfectly even surface so as not to impede walking. And the tesserae were usually limited to pebble, stone, and shell.

(Fig. 8.22), at the foot of Mount Sinai [SY-nye], in the desert near the tip of the Sinai peninsula, in modern Egypt. It was at Mount Sinai that, according to the Old Testament, God gave Moses the Ten Commandments. The monastery was sited on the spot of the burning bush, where tradition held that God had first addressed Moses and instructed him to go to Egypt and lead the Jews to the Promised Land. Thus, the monastery had great symbolic significance.

Justinian decorated the monastery church with marble imported from quarries on an island in the Sea of Marmara, approximately 112 miles southwest of Constantinople. On the east end of the monastery, above these marble panels, in the conch dome of the apse, artisans created an extraordinary mosaic of the *Transfiguration of Christ* (Fig. 8.23). The scene depicts the moment described in Matthew 17:1–6 when Jesus becomes a dazzling vision on Mount Tabor and a heavenly voice proclaims him to be God's son. In the center of the mosaic, Jesus appears within a mandorla [MAN-dor-luh], the light encircling or emanating from the entire figure of a sacred person, here an almond-shaped halo that signifies his glory. At his sides are the Old Testament prophets Elijah and Moses, and the disciples John, Peter, and James cower beneath his feet in amazement. Mount Tabor seems to be represented by the layered bands of greens and yellows at the bottom of the image—each of the figures except Christ seems to stand, kneel, or lie on it—but there is no real sense of space here. Rather, the entire scene is bathed in the celestial gold light that emanates in rays from Christ's white tunic. This effect is heightened by the way light reflects off the irregular surface of the *tesserae*, the small pieces of stone or glass, that make up the mosaic (see *Materials & Techniques*, above).

The Abandonment of Naturalism The naturalism that dominates Greek and Roman classical art is not apparent in the St. Catherine mosaics. The artists evidently had no interest in depicting the visual appearance of the material world; instead, they turned their attention to the supernatural event of the Transfiguration. There is no perspectival depth—as if the vision of Christ's transformation obliterates the possibility of even thinking in terms of real space.

Although the event depicted is highly dramatic, the participants' gestures are stiff, lacking the natural drama of Hellenistic sculpture (compare with Fig. 5.23, the *Dying Gaul*). The figures are highly stylized and realized in a uniform geometric configuration. Notice the repeated use of a lozenge shape to depict the thighs of the disciples. And despite being bathed in light, these figures cast no shadows. The robes of both John, on the left, and James, on the right, blow backward in identical but improbable folds. The feet of the two prophets and Christ not only look alike but are similarly positioned. The sandaled feet of the three disciples could be transferred one to the other without a problem.

The artists, in other words, employed a standardized shorthand to depict the events. It is as if their artistic vocabulary consisted of a limited repertoire of feet, hands, robes, and faces, all of which could be used over and over again in any context, the most important figure being the largest. We call this style, which is at once formally abstract and priestly, *hieratic*. In retrospect, we can see the abstraction developing in earlier Christian art, in the reliefs, for instance, on Constantine's triumphal arch in Rome (see Fig. 8.7). But whereas the figures on Constantine's relief are squat and blocky, now, 300 years later, they are tall, thin, and elegant. These priestly figures float weightlessly in an ethereal space, as if, in witnessing the supernatural mystery of the Transfiguration, they have been transfigured themselves. But the differences between these figures and earlier ones are not just stylistic—they extend to meaning as well. Constantine had built and decorated his triumphal arch to celebrate his temporal power, but the mosaic at St. Catherine's celebrates a power that is otherworldly, just as Christ stands wholly disconnected from the ground.

CONTINUITY & CHANGE



Dying Gaul, p. 162

CONTINUITY & CHANGE



Arch of Constantine, p. 258

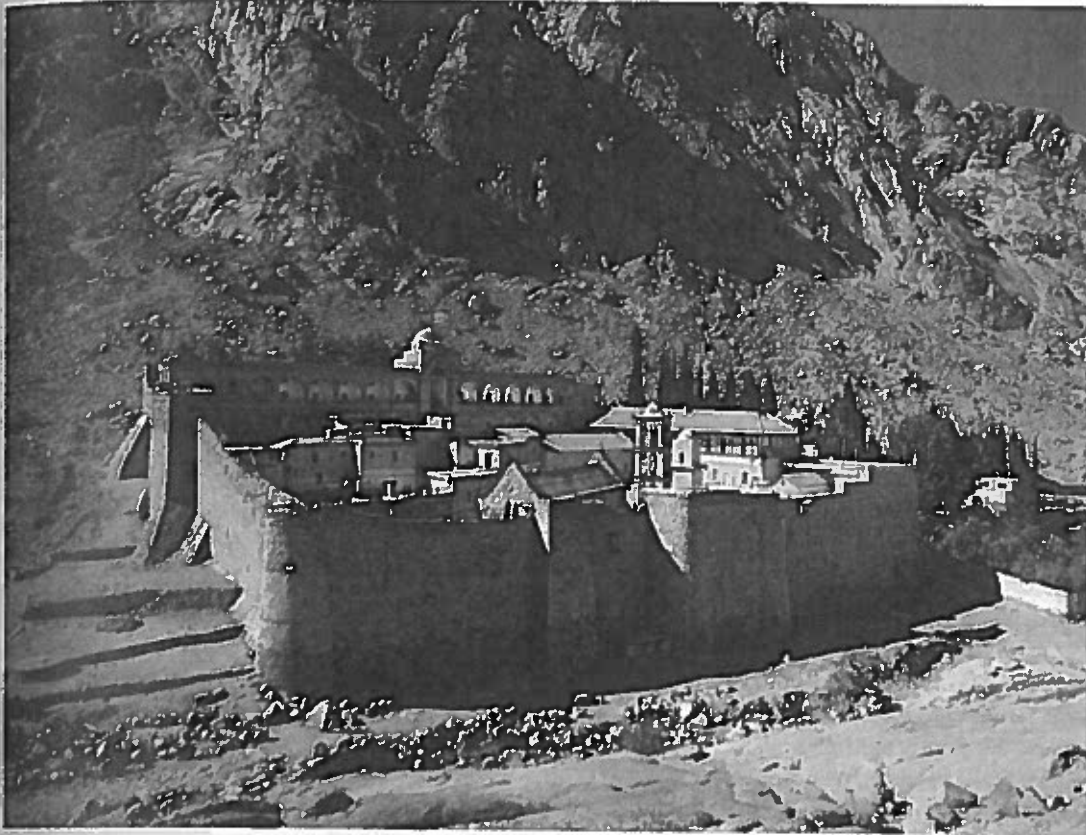


Fig. 8.22 St. Catherine's Monastery, Sinai. ca. 548–65. The fortress around the monastery was built to protect pilgrims and monks from marauding "Saracens" (i.e., Arabs).



Fig. 8.23 Transfiguration of Christ, Church of the Virgin, St. Catherine's Monastery, Sinai. ca. 548–65. Mosaic. The marble panels, below the mosaic, must have been brought to the relatively remote site at great expense. The creators of the mosaic were probably also from elsewhere, though an inscription attributes the work to "the zeal" of Theodoros the Priest. He may have cultivated Justinian's patronage of the monastery.

RAVENNA AND THE WESTERN EMPIRE

The most extensive examples of Byzantine art survive in Ravenna [ruh-VEN-uh], a relatively small city in northern Italy near the Adriatic [ay-dree-AT-ik] Sea. (In the Eastern Empire, conquering Muslims were not nearly so interested in preserving Christian art and architecture as their Christian counterparts in the West.) Ravenna's art was the result of over 250 years of Byzantine rule, beginning in 402 when Honorius, son of Theodosius I, made it the capital of the Western Empire. Surrounded by marshes and easily defended from the waves of Germanic invasion that struck at Rome, by the fifth and sixth centuries, Ravenna was the most prosperous city in the West, the economic, political, and religious center of Western culture. Its art reflected its stature.

Honorius was succeeded by the first of several women to rise to positions of power in the Byzantine world, the empress Galla Placidia [GAL-uh pluh-SID-ee-uh], whose name means "the gentle, or mild, woman of Gaul." Galla Placidia was Honorius's half-sister. The Goths captured her in Rome in 410, where she became the wife of the Goth ruler. By 416, her Goth husband dead, she returned to Ravenna and married the consul Constantius, who apparently tried to usurp the throne. Ultimately, she ruled as Galla Placidia Augusta until 450.

In Ravenna, Galla Placidia built a large basilica dedicated to Saint John the Evangelist. (Only the columns, capitals, and bases of the original church survive in the present San Giovanni Evangelista.) The story goes that on her return to Ravenna, while caught in a severe storm at sea, she prayed to Saint John for deliverance, promising to build

him a church if she survived. She also built a second large, cross-shaped church, Santa Croce [KROH-chay], which reputedly contained a relic of the True Cross, the one upon which Christ had been sacrificed.

Church Building under Theodoric

A period of turmoil followed Galla Placidia's death and the murder of her son and successor. It culminated in the capture of Ravenna by the Germanic leader Odoacer in 476 and Theodoric's defeat of Odoacer in 493. Like Galla Placidia, Theodoric soon constructed his own basilica, now called Sant'Apollinare Nuovo [sant uh-POL-ih-NAHR-eh noo-OH-voh] (Fig. 8.24), one of the best-preserved sixth-century Byzantine churches. On both sides of the nave, there are three tiers of mosaic decoration. At the top, in the clerestory, 26 scenes depict the life of Christ, 13 on each side (Fig. 8.25). Below these rather small scenes, between the clerestory windows, are 16 figures on each side, possibly representing the prophets of the Hebrew Bible on one side and the apostles and evangelists of the New Testament on the other. The bottom tier of mosaics was radically altered under Justinian, whose general Belisarius conquered Ravenna in 540. Ostrogothic Ravenna had followed the theological position of Bishop Arius of Alexandria. The Arians denied that Christ and God could be of the same essence, nature, or substance. Christ is therefore not like God, not equal in dignity with God, nor even coeternal with God. In contrast, Orthodox Christians, like Justinian, argued that God and his Son were one and the same. Justinian could thus justify his military campaign on the grounds that he was overthrowing a heretical Christian state.



Fig. 8.24 Nave of Sant'Apollinare Nuovo, looking east, Ravenna, ca. 500 and later. The rising water table in Ravenna has caused the floor of the church to be raised four feet since the sixth century. In the process, a fourth tier of mosaics has been lost, cut out of the wall to accommodate the higher floor. It is not clear what was represented in this tier of mosaic, nor do we know what originally decorated the apse, which was also destroyed.

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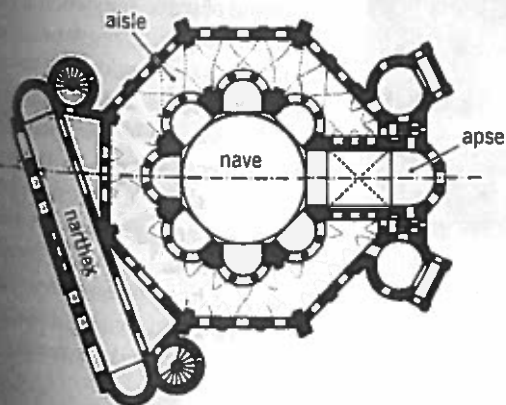


Fig. 8.25 *The Healing of the Blind*, wall mosaic, Sant'Apollinare Nuovo, Ravenna, ca. 500. This is one of the 26 scenes that depict the life of Christ at the top of the nave mosaics above the clerestory windows. The series as a whole is the earliest surviving example of such a complete iconography. It has survived unaltered from Theodoric's time. The Crucifixion, which is not included, may have decorated at least part of the original apse, which has been destroyed.

But Justinian had other motives as well. Theodoric's Ravenna was not only the center of both civic and Church authority in the West, it was also a thriving trade center, connected to the nearby port of Classis, on the Adriatic, by canal. The luxurious decoration of the port's many churches—as many as 60 churches may have been built in the city between 400 and 750—is the result of its trade with the Eastern Empire and the importance the Eastern emperors attached to the city as their seat of power in the West. The emperor Justinian's decision to send Belisarius to seize Ravenna in 540 is at least partly attributable to the city's wealth and reputation.

San Vitale

In Ravenna, Justinian's new Orthodox clergy oversaw the construction of the church of San Vitale [ve-TAHL-eh], a unique central-plan building, similar to Santa Costanza [koh-STAHN-zuh] in Rome (see Figs. 8.14 and 8.15), but octagonal in design rather than circular (Figs. 8.26 and 8.27). On seven of its eight sides, the central space opens out into



Figs. 8.26 and 8.27 Exterior and plan of San Vitale, Ravenna. Dedicated 547. Like most Byzantine churches, San Vitale is a study in contrasts. The exterior is exceedingly plain. (The decorated doorway is a later addition.) But inside, the elaborate decoration symbolizes the richness of the spiritual world.

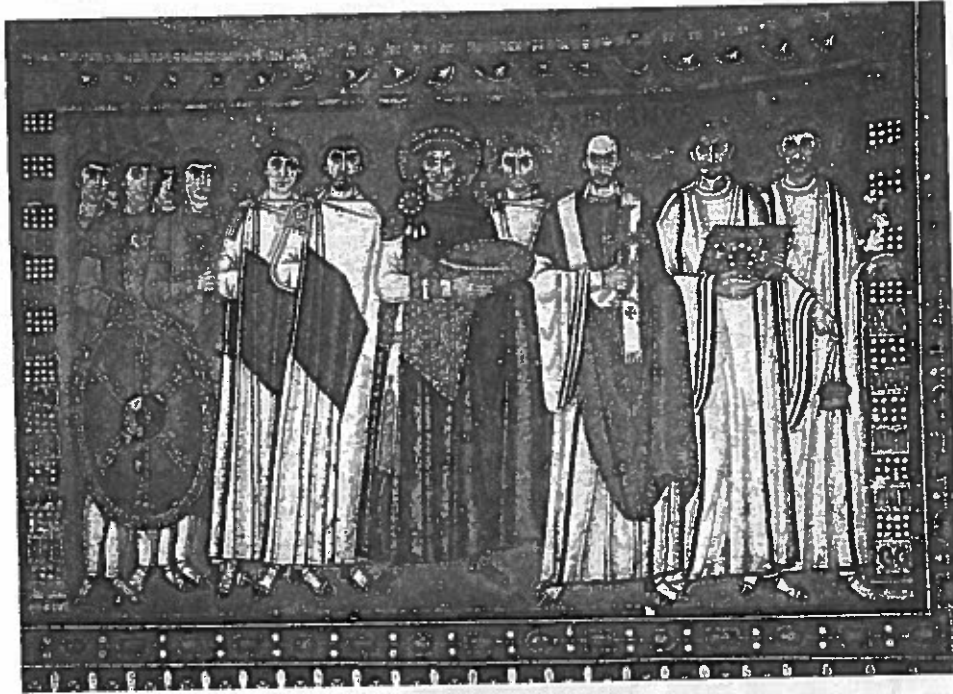
semicircular bays or niches called *exedrae* [EK-suh-dree], which themselves open, through a triple arcade, to the ambulatory. On the eighth side, the bay extends into a rectangular sanctuary and apse. The narthex (entrance hall), which has long since disappeared, was a lozenge-shaped space set at an angle to the church itself. Entering from the double doors, the visitor has two options. One is to look either directly across into the *exedrae* spaces, seeing a complex pattern of

curves, niches, columns, and mosaics. The other is to glance directly across the central space to the sanctuary and apse, which rose two stories to a gorgeously decorated conch dome, decorated with intricately interwoven vines and animals in a predominantly gold and green mosaic.

On the side walls of the apse, level with the windows, are two mosaics, one featuring the emperor Justinian (Fig. 8.28) and the other the empress Theodora (Fig. 8.29). Perhaps inspired by the as yet unaltered processions in Sant'Apollinare Nuovo, which, as we have seen, probably featured Theodoric and his court, the artist has the emperor and empress lead retinues of courtiers toward the back of the apse. Possibly they proceeded toward reunion with Christ in paradise, as depicted in the conch-dome mosaic of the apse. A haloed Justinian carries a paten, the plate on which the bread is placed in the celebration of the Eucharist [YOO-kuh-rist]. On the other side of the apse, the empress holds a chalice of wine for the Eucharist, and on the bottom of her robe are the Three Magi, who, like her, come bearing gifts to the Virgin and Child. These mosaics possess a distinct political agenda, serving as propaganda to remind the faithful of the emperor's divine authority—the union of the political and spiritual spheres.

The most intriguing aspect of the two mosaics, however, is their composition. Even though Theodora, for instance, stands before a scalloped half-dome niche and the attendant to her right pulls back a curtain as if to reveal the space beyond, these mosaics do not represent a view into a natural world extending back toward a distant horizon (compare Fig. 6.29). Rather, Byzantine art conceived of space as extending forward from the picture plane, with parallel lines converging on the eye of the beholder. This technique, known as *reverse perspective*, makes objects appear to tip upward—note the top of the fountain to Theodora's right—and elongates

and heightens figures. Human eyesight, Byzantine artists believed, is imperfect and untrustworthy, a fact demonstrated by the apparent decrease in the size of objects as they recede in



Figs. 8.28 and 8.29 (top) *Emperor Justinian with Maximian, Clergy, Courtiers, and Soldiers*; and (bottom) *Empress Theodora with Courtiers and Ladies of Her Court*; wall mosaics, San Vitale, Ravenna, ca. 547. Standing between and behind Justinian and Maximian is Julianus Argentarius, the benefactor of the church.

the distance. By depicting objects in reverse perspective and in shallow space, Byzantine artists rejected earthly illusion, privileging the sacred space of the image over the mundane space of the viewer.

Music in Ravenna

We know about the music of the Church in Ravenna almost exclusively at a theoretical level. Music was considered a branch of mathematics and studied as such, and no medieval manuscripts of musical notation have survived from before the late ninth century. Yet as early as the fifth century, in Augustine of Hippo's *Confessions*, the role of music in the Church liturgy was a topic of much discussion. Augustine was himself ambivalent about it:

I realize that when they are sung . . . sacred words stir my mind to greater religious fervor and kindle in me a more ardent flame of piety than they would if they were not sung. . . . But I ought not to allow my mind to be paralyzed by the gratification of my senses, which often leads it astray. . . . Sometimes, too, from over-anxiety to avoid this particular trap I make the mistake of being too strict. When this happens, I have no wish but to exclude from my ears, and from the ears of the Church as well, all the melody of those lovely chants to which the Psalms of David are habitually sung. . . . But I remember the tears that I shed on hearing the songs of the Church in the early days, soon after I had recovered my faith. . . . So I waver between the danger that lies in gratifying the senses and the benefits which, as I know from experience, can accrue from singing.

Thus, we know that as early as the late fourth century, not long after Augustine's revelation in the garden (see Reading 8:5), "lovely chants" based on the Psalms of David were habitually sung in Christian churches. Just what they sounded like is another question entirely, although Ambrose's surviving hymns give us some clue.

Among the ministers who served Theodoric in Ravenna was Boethius [boh-EE-the-us], author of *De institutione musica* (*The Fundamentals of Music*), which would remain in obscurity until the late ninth century. There are, Boethius argues, three classes of music: *musica mundana*, *musica humana*, and *musica instrumentalis*. These are illustrated in the twelfth-century frontispiece to one of the earliest compilations of medieval music for the liturgy, the *Magnus liber organi*, or *Great Book of Polyphony* (Fig. 8.30), showing Boethius's continuing influence throughout the medieval period. In the top register of the frontispiece, the allegorical figure of Musica points her baton at a sphere containing the four elements—earth, water, air, and fire (represented by the stars). This is *musica mundana*, the highest form of music, created by planetary motion, the classical "harmony of the spheres." Below, in the second register, she lifts her baton for *musica humana*, the music humans create through the harmonious attunement of mind and body, reason and spirit. Finally, at the bottom,



Fig. 8.30 *The Three Varieties of Music*, frontispiece to *Magnus liber organi F*. ca. 1245–55, probably in Paris. Firenze, Biblioteca Medicea Laurenziana Ms. Laur. Plut. 29 1, c. 1v. Su Concessione del Ministero per i Beni e le Attività Culturali. È vietata ogni ulteriore riproduzione con qualsiasi mezzo. Photo: Donato Pineider. There are four surviving manuscripts of the *Magnus liber organi*. This one is referred to as "F" because it is housed in Florence, Italy. It is the largest and the oldest of the four.

she shakes her finger, somewhat disapprovingly, at *musica instrumentalis*, the music of sound, the only one of the three that can be heard by mortals. Likewise, for Boethius, there were three classes of musician—those who play instruments, those who sing, and those who judge performance and song. These last, persons grounded in reason and thought, are the most musical, he argues, once again demonstrating the medieval emphasis on music as a form of philosophical thought.

THE LATER BYZANTINE EMPIRE

Strange as it may seem, Justinian and Theodora never actually set foot in Ravenna, let alone San Vitale, and their depiction on its walls is probably best understood as a symbol of the relations between Church and State in the Byzantine Empire. Intimately interrelated and mutually dependent, the two balanced one another. Thus, while Maximian, the bishop of Ravenna, stands a little forward of Justinian in the San Vitale mosaic, Justinian's arm and the paten it holds lie (somewhat improbably) in front of Maximian. It is easy to understand, then, how the century